4.9 Device 4PP420.1043-75

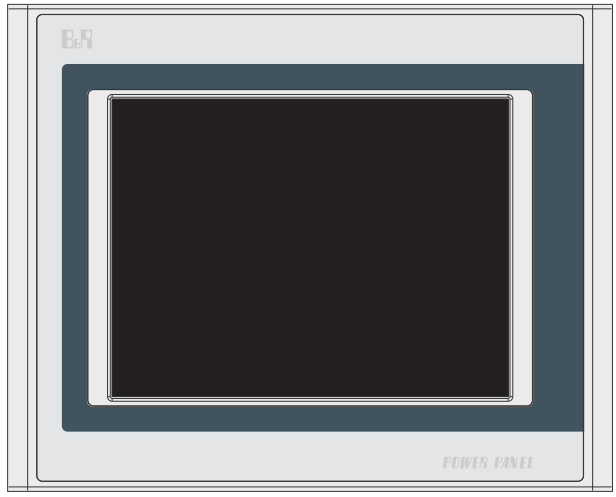

Figure 128: Front view - 4PP420.1043-75

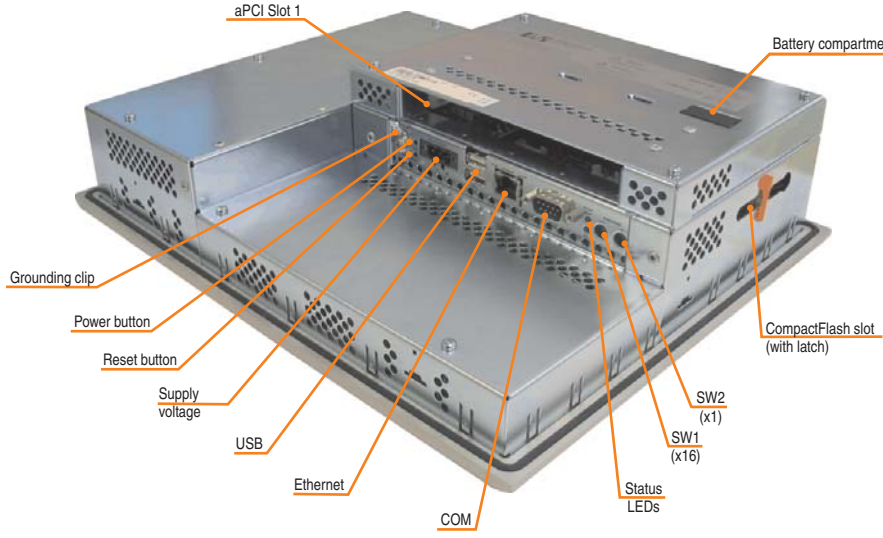

Figure 129: Rear view - 4PP420.1043-75

4.9.1 Technical data

Features	4PP420.1043-75
Boot loader / Operating system	Automation Runtime
Processor Type Expanded command set L1 cache L2 cache Floating point unit (FPU) Cooling Method	 Geode LX800 500 MHz, 32-bit x86 MMX technology, 3D Now 128 KB (64 KB L cache / 64 KB D cache) 128 KB Yes Passive (heat sink)
Flash	2 MB (for firmware)
Memory Type Quantity	 DDR SDRAM 128 MB (64 MB < Rev. D0)
Graphics Controller Memory	 Geode LX800 8 MB shared memory (reserved by main memory)
SRAM Quantity Battery-buffered	 512 KB Yes
Watchdog Controller	 MTCX[1)]
Power failure logic Controller Buffer time	 MTCX[1)] 10 ms
Real-time clock (RTC) Battery-buffered Accuracy	 Yes At 25°C: typically 30 ppm (2.5 seconds) [2)] per day
Battery Type Removable Lifespan Backup capacitor (for changing battery) Buffer time	 Renata 950 mAh Yes, accessible from the outside 3 years [3)] 10 minutes
Ethernet Controller Transfer rate Connection Cables NE2000-compatible	 Intel 82551ER 10/100 Mbps RJ45 twisted pair (10 Base T / 100 Base T) S/STP (category 5) -
CompactFlash Type Amount Connection	 Type I 1 slot Primary IDE device
Serial interface COM Type UART Transfer rate Connection	 RS232, modem-capable, not electrically isolated 16C550 compatible, 16-byte FIFO Max. 115 kBaud 9-pin DSUB

Table 72: Technical data - 4PP420.1043-75

Features	4PP420.1043-75
USB interface Type Amount Transfer rate Connection Current load	 USB 1.1, USB 2.0[4)] 2 Low speed (1.5 MBit/s), full speed (12 MBit/s), to high speed (480 Mbit/s)[4)] Type A Max. 500 mA per connection
Reset button	Yes, accessible from the outside
Power button	Yes, accessible from the outside
LEDs	1x CF (yellow) 1x combined power (red/green) and user (yellow)
Mode / Node switch	2, 16 digits each
aPCI slots	1 (see B&R System 2005 manual for available aPCI interface modules)
Display Type Diagonal Colors Resolution Contrast Viewing angle (see page 488) Horizontal Vertical Background lighting Brightness Half-brightness time Screen rotation	 TFT colors 10.4 in (264 mm) 262144 colors VGA, 640 x 480 pixels 600:1 Direction R / direction L =70° Direction U = 45°/ direction D = 35° 450 cd/m² 55000 hours Yes, see chapter 3 "Commissioning", section "Screen rotation" on page 361
Touch screen Technology Controller Degree of transmission	 Analog, resistive Elo, serial, 12- bit Up to 80% ± 5%
Filter glass Degree of transmission Coating	-
Keys/LED Function keys Soft keys Cursor keys Number block Other keys Key lifespan LED brightness	-
Electrical characteristics	
Power supply Rated voltage Rated current Starting current Power consumption Electrical isolation	 18 - 30 VDC 0.71 A Maximum 2.8 A Typically 17 W Yes
Bleeder resistance	0 Ohm

Table 72: Technical data - 4PP420.1043-75 (Forts.)

Mechanical characteristics	4PP420.1043-75
Outer dimensions	
Width	323 mm
Height	260 mm
Depth	86 mm
Front	
Frame	Aluminum, naturally anodized[5)]
Design	Gray[5)]
Membrane	Polyester
Dark gray border around display	Similar to Pantone 432CV[5)]
Light background	Similar to Pantone 427CV[5)]
Gasket	Flat gasket around display front
Housing	Metal
Weight	Approx. 3.9 kg (without aPCI interface modules)
Environmental characteristics	
Ambient temperature	
Operation	0 .. +50°C
Storage	-20 .. +70°C
Transport	-20 .. +70°C
Relative humidity	See 4.9.2 "Temperature humidity diagram" on page 200
Vibration	
Operation (continuous)	2 - 9 Hz: 1.75 mm amplitude / 9 - 200 Hz: 0.5 g
Operation (occasional)	2 - 9 Hz: 3.5 mm amplitude / 9 - 200 Hz: 1 g
Storage	2 - 8 Hz: 7.5 mm amplitude / 8 - 200 Hz: 2 g / 200 - 500 Hz: 4 g
Transport	2 - 8 Hz: 7.5 mm amplitude / 8 - 200 Hz: 2 g / 200 - 500 Hz: 4 g
Shock	
Operation	15 g, 11 ms
Storage	30 g, 15 ms
Transport	30 g, 15 ms
Protection type	IP20 back side (only with installed CompactFlash card, inserted aPCI module or with an optional aPCI cover) IP65 / NEMA 250 type 4X, dust and sprayed water protection (front side)
Altitude	Max. 3000 m

Table 72: Technical data - 4PP420.1043-75 (Forts.)

1) Maintenance Controller Extended.

2) At max. specified ambient temperature: typ. 50 ppm (4 seconds) - worst-case 100 ppm (8 seconds).

3) Typical lifespan (at 50% buffer operation, temperature 25°C when off, 50°C when on).
Maximum lifespan in 24-hour operation (no buffer) 6 years at 25°C or 5 years at 50°C.
Maximum lifespan switched off: 2 years at 25°C or 1 year at 50°C.

4) The actual value depends on the operating system or diver being used.

5) Depending on the process or batch, there may be visible deviations in the color and surface structure.

4.9.2 Temperature humidity diagram

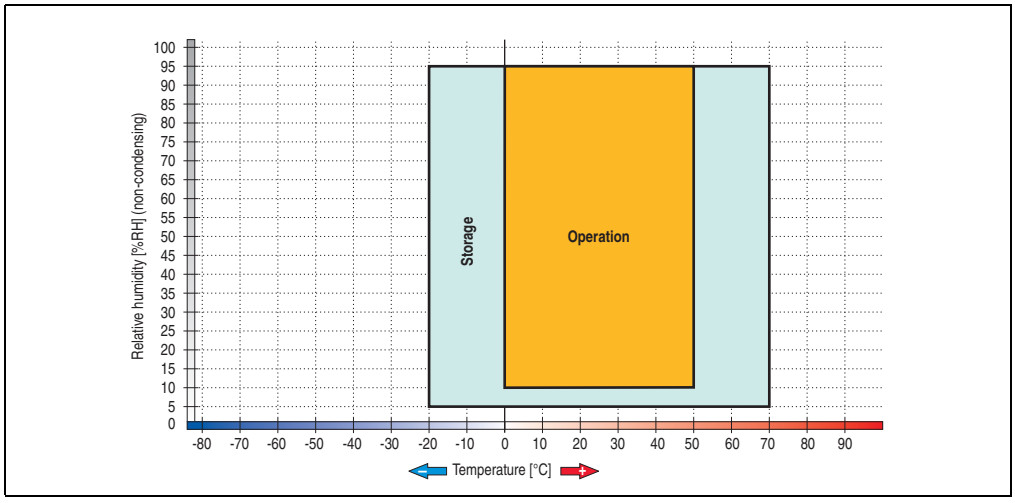

Figure 130: Temperature humidity diagram - 4PP420.1043-75

4.9.3 Dimensions

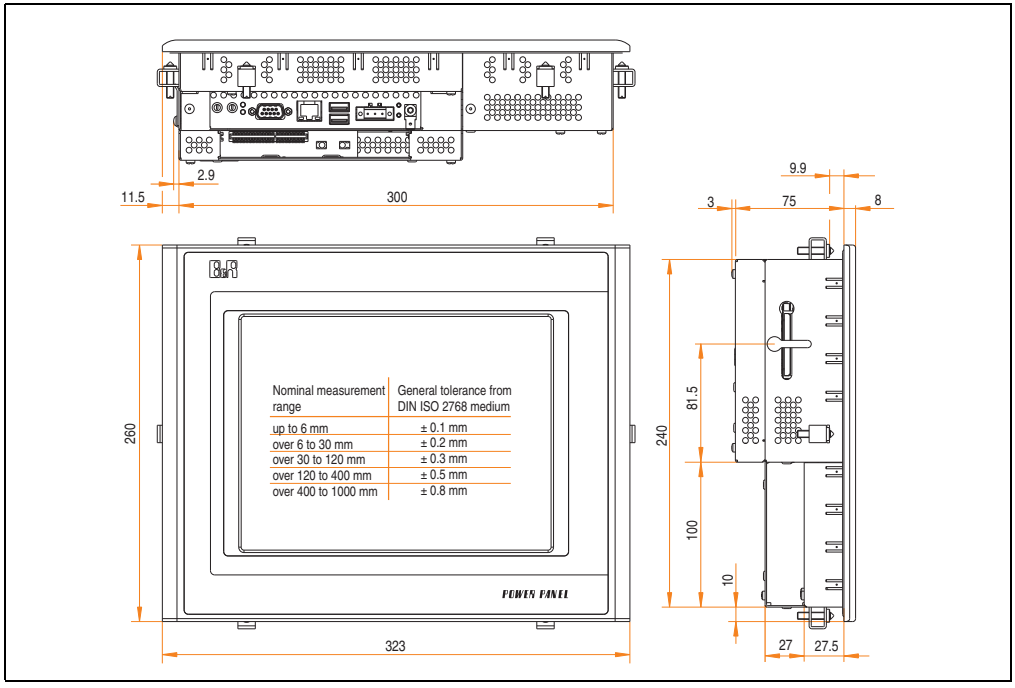

Figure 131: Dimensions - 4PP420.1043-75

4.9.4 Cutout installation

The cutout hole is to be made according to the following dimensions for cutout installation. The device must be mounted using the retaining clips included in delivery.

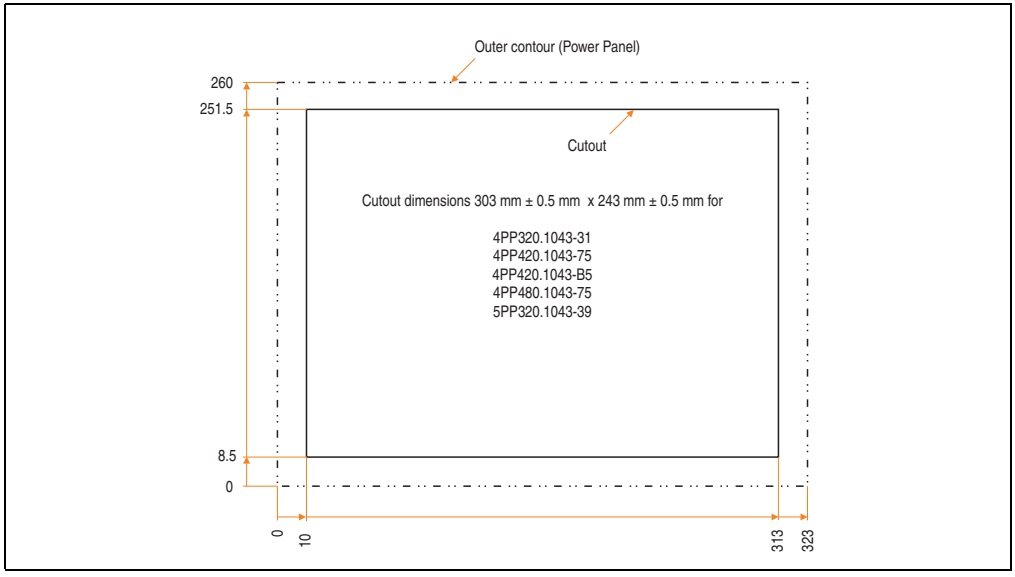

Figure 132: Cutout installation - 4PP420.1043-75

4.9.5 Contents of delivery

The following components are included in the delivery of the Power Panel device:

Amount	Component
1	Power Panel PP420 10.4" VGA, 1 aPCI, touch screen
6	Retaining clips included
1	Lithium battery 3 V / 950 mAh included

Table 73: Contents of delivery - 4PP420.1043-75